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ATTACHMENT 2



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT Marina, California, on this date of May 28th, 2004 by and between RBF Consulting ("Consultant") and Geoscience Support Services Inc. ("Subconsultant").

Attention: Dennis E. Williams, Ph.D.

Project: Coastal Water Project

Description of Subconsultant's Services: Geohydrologic Consulting per attached May 28th 2004 letter.

Subconsultant Fee: \$143,512 which includes the cost of professional services performed by others and all expenses incurred in the performance of the work.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

By: Lawrence E. Gallery Jr.
(Signature)

Lawrence E. Gallery Jr., P.E.
(Type/Print Name)

Senior Vice President, Water Resources
(Title)

Date: 7-31-04

RBF Job No: 10-103579 - Task No. 3.01

Geoscience Support Services, Inc.

SUBCONSULTANT
By: Dennis E. Williams
(Signature)

Dennis E. Williams
(Type/Print Name)

President
(Title)

Date: 28-JUL-04

P.O. No: _____





GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
 - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
 - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
 - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
 - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 combined single limit each occurrence and annual aggregate.
 - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be canceled or ordered reduced by the Subconsultant, except with at least thirty (30) days prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Subconsultant agrees to indemnify and hold harmless Consultant, its officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys' fees, arising from the negligent acts, errors or omissions of Subconsultant, its officers, directors and employees, or anyone for whom Subconsultant is legally liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
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General Terms

Subconsultant Initials

Consultant Initials: 



Consulting Engineers and Land Surveyors of California

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Attention: Dennis E. Williams, Ph.D.

Project: Coastal Water Project

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Subconsultant Fee: \$143,512 which includes the cost of professional services performed by others and all expenses incurred in the performance of the work.

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RBF CONSULTING

By: Lawrence E. Gallery Jr.
(Signature)

Lawrence E. Gallery Jr., P.E.
(Type/Print Name)

Senior Vice President, Water Resources
(Title)

Date: 7-31-04

RBF Job No: 10-103579 - Task No. 3.01

Geoscience Support Services, Inc.

SUBCONSULTANT

By: Dennis E. Williams
(Signature)

Dennis E. Williams
(Type/Print Name)

President
(Title)

Date: 28-02-04

P.O. No:



AUG-04-04 01:52PM

FROM: WATER RESOURCES

+

T-130 P.03/05 F-868



GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

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General Terms

Subconsultant Initials

Consultant Initials

Two handwritten signatures are present. The top signature is in dark ink and appears to be "J. B. ...". The bottom signature is in lighter ink and appears to be "J. ...".

GEOSCIENCE



May 28, 2004

Mr. Lawrence E. Gallery Jr., P.E.
Senior Vice President, Water Resources
RBF Consulting
3180 Imjin Road, Suite 104
Marina, CA 93933

Subject: Revised Scope of Work (Task 4.3) for the Coastal Water Project for California American Water

Dear Larry:

As per our recent conversation with Paul Findley, this letter outlines our revised scope of work and cost estimate to revise GEOSCIENCE's third task under the Beach Well Feed Water Supply Investigation:

4.1 Beach Well Feed Water Supply Investigation

Purpose and Scope

The purpose of Task 4.1 will be to investigate the feasibility of constructing horizontal directionally drilled wells (HDD) which will serve as the intake supply for the Moss Landing Seawater Reverse Osmosis (SWRO) plant. It is understood that the supply requirement from the wells will be approximately 42 mgd. The work will investigate well design strategies and technology needed to adapt traditional horizontal well drilling methods, which are currently used for oil and gas production, to construction of near-shore intake wells for the Moss Landing SWRO plant. The work will focus on novel well design and completion techniques that will optimize well and filter pack design methods. Specific subtasks are described below:

GEOSCIENCE SUPPORT SERVICES INCORPORATED
Ground Water Resources Development
P.O. Box 220, Claremont, CA 91711
FAX 909-920-0403
909-920-0707

Task 4.1 Background Data Collection and Assessment – Moss Landing

Collect and assess all available reports and data pertaining to geohydrologic characteristics in the vicinity of the Moss Landing SWRO plant. Data review will include, but not limited to data on existing wells, borings, pumping tests, geologic maps, cross sections, water levels, published reports, informal reports, technical memorandums and any other relevant data.

Task 4.2 Field Site Investigation – Moss Landing

A field investigation will be made of potential HDD well sites. Potential sites will consider both HDD production potential as well as identify any site issues which may prove problematic in construction of horizontal wells or proximity to the SWRO plant. During the field reconnaissance, a location for the exploratory/test boring will also be determined.

Task 4.3 Investigation of the Feasibility of HDD Intake at the Armstrong Ranch Site in Marina

This task will characterize the subsurface materials and hydraulic properties in the aquifer systems in the vicinity of Armstrong Ranch area. For example, characterization will determine the extent and nature of the 180-ft and 400-ft aquifers beneath the site, their production potential, and their water quality. To assist in this task, a variable density ground water model will be used to simulate both project flows, water quality (TDS, chlorides), and impacts on freshwater/saltwater aquifers.

Task 4.4 Investigate technology needed to drill and complete HDD wells:

This task will involve a collaborative effort between petroleum industry technology, ground water well drilling technology; well casing and screen companies and leading horizontal well construction firms. The key to developing HDD technology as a viable source for SWRO supply is to develop a method which can:

- 1) Stabilize boreholes in unconsolidated materials which are typically found at shallow depths beneath the sea floor and enable completion of pre-packed (or post-packed) screens in a horizontal bore;
- 2) Design and construct long-horizontal wells which can provide sufficient flow to meet SWRO intake demand.

This task will evaluate and recommend the best drilling and completion technology which may be subsequently evaluated in a follow-up investigation where a pilot horizontal well would be drilled and completed. Potential methods include:

- Use of petroleum drilling "mud motor" technology followed by enlarging the borehole prior to placing casing and screen string.
- Develop a methodology for placement of filter packed screens to long distances in a horizontally drilling borehole.
- Test the effectiveness of pre or post-packed screens in meeting intake requirements.
- Work with well-screen manufactures to develop a cost-effective technology for producing a filter-packed well screen capable of being placed in a horizontal well beneath the sea bed.

Task 4.5 Summary Report

The results from all the tasks will be summarized into a comprehensive report discussing the feasibility of using HDD wells as the 42 mgd source for the Moss Landing SWRO plant. Essential sections of the report will include:

- Background data assessment
- Geohydrologic characterization of aquifers in the vicinity of the Moss Landing SWRO plant and the Marina Site
- HDD construction and completion technology

- Feasibility of using HDD wells for supply at Moss Landing and Marina
- Estimated production from each HDD well
- Recommendations for further work and verification.

The estimated cost for this scope of work is \$143,512 as detailed on the attached table. If you have any questions, please call me at (909) 920-0707.

Sincerely,



Dennis E. Williams, Ph.D.
President

encl.

cc: Paul Findley

RBF Consulting - Coastal Water Project - California American Water
Estimated Hours and Costs - GEOSCIENCE Support Services, Inc.

HOURS									
Description / Hourly Rate		Principal Hydrologist	Senior Geohydrologist/Modeler	Staff Geohydrologist	Graphics	Clerical	Total Labor	Reimbursable Expenses	Total
		\$252	\$149	\$79	\$79	\$52			
PART I - Beachwell Feedwater Supply Study	Task 1 - Background Data Collection and Assessment - Moss Landing Site	16	40	80			\$16,312	\$250	\$16,562
	Task 2 - Field Site Investigation - Moss Landing Site	36	36	0	0	0	\$14,436	\$0	\$14,436
	Task 3 - Investigation of the Feasibility of HDD Intake at the Armstrong Ranch Site in Marina (Includes Field Site Investigation)	32	144	80	12		\$36,788	\$250	\$37,038
	Task 4 - Investigate HDD Technology with Petroleum Industry, Water Well Industry and Casing and Screen Manufacturers	80	100	80	16	2	\$42,748	\$5,000	\$47,748
	Task 5 - Summary Report - Beachwell Feedwater Supply Study	16	80	100	40	8	\$27,428	\$300	\$27,728
Total:							\$137,712	\$5,800	\$143,512



P.O. No. 5494
Date: August 1, 2008
Job No.: 70-100168.001

Vendor:

Ship To:

Geoscience Support Services, Inc.	RBF Consulting
P.O. Box 220	14725 Alton Parkway
Calremont, Ca., 91711	Irvine, CA 92618-2027

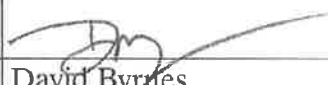
Order Date: Contact:

Terms:

For:

8/1/08	Dennis Williams		Paul Findley
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QUANTITY	PLEASE SUPPLY ITEMS LISTED BELOW	PRICE
	Professional services rendered pursuant to the signed	
	Agreement dated May 16 th 2008 between	
	Consultant and Sub-Consultant.	
	Total Contract Amount	\$15,000.00

IMPORTANT	
P.O. NUMBERS MUST APPEAR ON ALL INVOICES, PACKAGES, ETC.	 David Byrnes Corporate Controller

RBF Consulting is an equal opportunity employer. We hereby incorporate by reference as part of this agreement applicable provisions of Executive Order 11246 covering race, color, religion, sex and national origin; the Vietnam-Era Veterans Readjustment Assistance Act of 1974, as amended, the Rehabilitation Act of 1973, as amended; Executive Order 11625 and 15 U.S.C. Sec. 637 as pertaining to minority business enterprises and small business concerns and Executive Order 12138 pertaining to women's business enterprises; and regulations issued pursuant to each. Pursuant to Executive Order 11246, and particularly 41 C.F.R. Sec. 60-1.2, and by acceptance of this contract, the contractor certifies that he does not and will not maintain any facilities in a segregated manner, or permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. Further, the contractor agrees that he will obtain a similar certificate prior to the award of any nonexempt subcontractor.

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 Alton Parkway, Irvine, CA 92618-2027 ■ P.O. Box 57057, Irvine, CA 92619-7057 ■ 949.472.3505 ■ Fax 949.472.8373

Offices located throughout California, Arizona & Nevada ■ www.RBF.com

printed on recycled paper



Consulting Engineers and Land Surveyors of California

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO at Monterey, California, on this date of May 16, 2008 by and between RBF Consulting (RBF) ("Consultant") and Geoscience Support Services Inc. (GSSI) ("Subconsultant").

Attention: Dennis Williams, Ph.D.

Project: North Monterey County Seawater Intrusion Barrier Feasibility Study

Description of Subconsultant's Services: Groundwater modeling of injection of reclaimed water into the 180-foot aquifer of the Salinas River groundwater Basin.

Time of Completion: 8 weeks from the date of this Agreement.

Subconsultant Fee: \$15,000, which includes the cost of professional services performed by others and all expenses incurred in the performance of the work.

Payments: Subconsultant shall submit monthly invoices to consultant. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

By: _____

(Signature)

Paul L. Findley

(Type/Print Name)

Vice President

(Title)

Date: _____

July 11, 2008

RBF Job No: 70-100168.001

Geoscience Support Services Inc. SUBCONSULTANT

By: _____

(Signature)

Dennis Williams

(Type/Print Name)

President

(Title)

Date: _____

2-JUL-08

P.O. No: _____

5494

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 Alton Parkway, Irvine, CA 92618-2027 # P.O. Box 57057, Irvine, CA 92619-7057 # 949.472.3505 # FAX 949.472.8373
Offices located throughout California, Arizona & Nevada # www.RBF.com



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General Terms

Subconsultant Initials

Consultant Initials:

Handwritten signatures of the Subconsultant and Consultant. The Subconsultant's signature is a stylized, cursive 'S' followed by a horizontal line. The Consultant's signature is a stylized, cursive 'C' followed by a horizontal line.




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Consultant Initials: 

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT San Diego, on this date of 11/12/12 by and between RBF Consulting ("Consultant") and Geoscience Support Services Inc. ("Subconsultant").

Attention: Dennis Williams

Project: Monterey Peninsula Water Supply Project

Description of Subconsultant's Services: Subconsultant shall provide as-needed geotechnical engineering services prior to the design of the test slant well per tasks to be determined by the Consultant.

Payments: Subconsultant shall submit monthly invoices to Consultant using the Subconsultant Invoice Form, attached hereto as Exhibit A. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof. The not-to-exceed limit for this contract is \$10,000.

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

By: _____

(Signature)

Paul L. Finley

(Type/Print Name)

Vice-President

(Title)

Date: _____

11/12/12

RBF Job No: 130770

Geoscience Support Services Inc.

By: _____

(Signature)

Dennis E. Williams

(Type/Print Name)

President

(Title)

Date: _____

20-Nov-2012

P.O. No: _____

SUPPLEMENT to SUBCONSULTANT AGREEMENT

AMENDMENT NO. 1

TO
SUBCONSULTANT AGREEMENT
FOR
PROFESSIONAL SERVICES

THIS AGREEMENT, entered into this 13th day of February, 2013, hereinafter referred to as Amendment No. 1, by and between RBF Consulting, located at 9755 Clairemont Mesa Blvd. San Diego, CA, 92124, hereinafter referred to as "RBF", and Geoscience Support Services Incorporated, located at P.O. Box 220, Claremont, CA, 91711, hereinafter referred to as "SUBCONSULTANT".

WHEREAS, RBF and SUBCONSULTANT have entered into an agreement on November 12, 2012 (hereinafter referred to as Original Agreement) for as-needed geotechnical engineering services for the Monterey Peninsula Water Supply Project (MPWSP) slant test well and

WHEREAS, RBF desires to amend the Original Agreement to have SUBCONSULTANT perform additional professional and technical services, and SUBCONSULTANT desires to perform such services,

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained, and intending to be legally bound hereby, the parties hereto agree as follows:

I. SCOPE OF SERVICES

In addition to technical services specified in the original Agreement, SUBCONSULTANT shall perform in a proper manner, satisfactory to RBF and in accordance with recognized codes of practice, the design services defined in Attachment A, but limited to Task 1.0 Test Slant and Observation Wells Design, including sub-tasks 1.1 and 1.2.

III. COMPENSATION AND PAYMENT

For satisfactory performance of the services in accordance with the recognized codes of practice as described above, the total SUBCONSULTANT not-to-exceed limit is increased to \$52,920 by this amendment. All other terms and conditions for compensation and payment shall be in accordance with the Original Agreement.

IV. TERMS AND CONDITIONS

All other terms and conditions of the Original Agreement shall remain in effect, unless otherwise specified herein.

V. ENTIRE AGREEMENT


Amendment No. 1 and the Original Agreement constitute the whole agreement between the parties with respect to the subject matter contained herein and there are no terms other than those contained therein. No modification or amendment of this Amendment No. 1 shall be valid unless in writing and signed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives have executed this Amendment No. 1 as of the date first written above.

RBF Consulting :

Geoscience Support Services, Inc.

By:


Vice-President

Title:

2-13-13

By:


President

Title:

18-Feb-13

ATTACHMENT A

GEOSCIENCE

February 6, 2013

Mr. Sarp Sekeroglu, P.E.
Principal Engineer
RBF Consulting
3180 Imjin Road
Marina, CA 93933

**Re: Proposal to Provide Geohydrologic Services – Test Slant Well and Observation Wells
 Monterey Peninsula Water Supply Project**

Dear Sarp:

As per your request, GEOSCIENCE is submitting the following scope of work and costs to provide geohydrologic services related to drilling, construction, development and testing of an 820 ft test slant well that is to be located adjacent to the beach near Marina, California. The work is understood to be part of the Monterey Peninsula Water Supply Project (MPWSP). In addition, our costs include field inspection services during drilling, construction, and development of three groups of observation wells planned to be located near the test slant well. Transducers will be installed in each well for the purpose of collecting ground water level and water quality information during the short- and long-term testing to that is to be conducted on the test slant well.

If you have any questions or comments, please do not hesitate to contact me at your convenience.

Sincerely,



Dennis E. Williams, Ph.D.
President
encl.

GEOSCIENCE SUPPORT SERVICES INCORPORATED
Ground Water Resources Development
P.O. Box 220, Claremont, CA 91711
T: 909-451-6650
F: 909-451-6638

**RBF CONSULTING
MONTEREY PENINSULA WATER SUPPLY PROJECT
SCOPE OF WORK**

1.0 TEST SLANT AND OBSERVATION WELL DESIGN

1.1 Test Slant Well – Revise Existing Detailed Technical Specifications and Drawings

GEOSCIENCE would revise existing technical specifications and construction drawings for drilling, construction, and testing of one test slant well using the dual rotary drilling method. The technical specifications and construction drawings would be bundled with RBF's front-end documents to complete the bid package. GEOSCIENCE would also prepare a detailed bid schedule, to be included with the bid package, with specific line items showing units and unit quantities for the construction of the well. Items included in the technical specifications would include (but are not necessarily limited to) the following:

- Well location, angle, depth and dimensions;
- Expected geohydrologic conditions;
- Permits to be acquired by the contractor;
- Compliance with discharge requirements, as necessary;
- Job conditions (e.g., noise suppression, drilling waste, runoff management, power, lighting, water, security, sanitation and work damage);
- Mobilization, demobilization, and cleanup;
- Potential drilling problems;
- Equipment, materials, and records to be furnished by the contractor;
- Records to be kept by the contractor;
- Drilling and construction procedures;
- Development procedures;
- Aquifer pumping and recovery tests;
- Water quality sampling and analysis;
- Downhole video camera and alignment surveys;
- Equipping with a designed submersible pump and instrumentation for long-term testing; and
- Well cover and final inspection.

The drawings would be prepared as 11" x 17" sheets for attachment to the technical specifications.

1.2 Observation Wells – Prepare Detailed Technical Specifications and Drawings

GEOSCIENCE would prepare the technical specifications and construction drawings for drilling, construction and development of the grouped observation wells that are anticipated to be drilled using the sonic drilling method, and to a maximum depth of approximately 400 ft below ground surface (bgs) into the upper portion of the 400 Ft Aquifer. Other aquifers penetrated would be the Dune Sand, and the 180 Ft Aquifer. The technical specifications and construction drawings would be bundled with RBF's front-end documents to complete the bid package. Additionally, GEOSCIENCE would prepare a detailed bid schedule, to be included with the bid package, with specific line items showing units and unit quantities for the construction of the well. Items included in the technical specifications would include (but are not necessarily limited to) the following:

- Well location, depth and dimensions;
- Expected geohydrologic conditions;
- Permits to be acquired by the contractor;
- Compliance with discharge requirements, as necessary;
- Job conditions (e.g., noise suppression, drilling waste, runoff management, power, lighting, water, security, sanitation and work damage);
- Mobilization, demobilization, and cleanup;
- Potential drilling problems;
- Equipment, materials, and records to be furnished by the contractor;
- Records to be kept by the contractor;
- Drilling and construction procedures;
- Development procedures;
- Installation of pressure transducers to monitor water levels; and
- Observation well covers and final inspection.

The drawings would be prepared as 11" x 17" sheets for attachment to technical specifications.

2.0 SLANT WELL CONSTRUCTION

GEOSCIENCE would provide on-site inspection services during the drilling, construction, and development of the test slant well. This cost estimate assumes the work would be conducted primarily on a full-time basis as the work would take place during daylight hours only, seven days per week. These costs do not include preliminary design, permitting, reporting, or project management (i.e., meetings), but are for design and inspection only.

2.1 Onsite Inspection during Drilling, Construction and Development of Test Slant Well

Field inspection would be provided on a part-time basis during borehole drilling. Formation samples would be collected at 10 ft intervals (or more frequently depending on the stratigraphy encountered). Samples would be identified as to material type and production potential by visually logging them in the field using the Unified Soil Classification System (USCS).

Using visual methods, up to ten (10) samples would be selected from materials collected from the borehole for mechanical grain size (i.e., sieve) analysis to assess permeability, sand migration potential, and uniformity coefficients. These analyses would be used as a basis for preparing the design for the graded filter pack and well screen.

Based on results from the mechanical grading analyses, GEOSCIENCE would design the filter pack with a pack to aquifer ratio of between 4 and 20, as well as using Terzaghi's criteria for the movement of fines through the filter pack, and for the permeability of the aquifer and filter pack. Based on mechanical grain size analysis, targeted aquifers would be identified. The final well design would include recommended depth intervals and diameters for the well casing and screen, recommended borehole diameter(s), and the proper screen opening size to complement the filter pack design. The recommended design would be submitted to RBF in electronic format for review and comment before implementation in the field.

Full-time inspection would be provided during installation of the casing, screen, appurtenances, filter pack, and annular seal to ensure that all materials are furnished and placed in accordance with the recommended design and technical specifications. Prior to installation, GEOSCIENCE personnel would inspect the filter pack material and the well casing and screen for compliance with the specified well design. As the filter pack and cement seal are being installed, GEOSCIENCE personnel would track the volume placed against the theoretical volume to ensure that there are no voids forming or bridging occurring within the annular space.

Initial well development by airlifting and swabbing is an extremely important component of the well completion and development process. GEOSCIENCE would provide full-time inspection during the airlift development process and would closely monitor discharge water turbidity and sand content to track the development progress of the well.

GEOSCIENCE would monitor final development by pumping and surging on a part-time basis. Tests for sand content and specific capacity would be performed frequently to measure the advancement of the development process and to ensure that the well is fully developed before beginning the aquifer pumping tests.

2.2 Mechanical Grading Analysis to Verify Pre-Designed Filter Pack Gradation

Use of a properly designed and installed filter pack will control sand production from the well when pumping. The pre-designed filter pack gradation would be verified based on mechanical grading analysis performed on ten aquifer intervals. The design will be designed based on industry standards regarding pack-to-aquifer ratios. The size of the screen openings will be designed to allow a minimal but acceptable amount of filter pack material to move through the screen. This controlled movement of filter pack material would permit the proper development of the filter pack and near-well zone.

2.3 Aquifer Pumping Tests

Once the well development process is considered complete, aquifer pumping tests would be performed to determine well and aquifer characteristics. The network of nearby observation wells would be monitored during constant rate testing to provide interference data and enable more accurate estimation of aquifer parameters. The following aquifer pumping tests would be performed:

- **Step Drawdown Pumping Test:** time drawdown measurements would be made to determine specific capacity and well efficiency relationships that are necessary to calculate the optimal production rate and pump setting. Typically three to four rates are selected for pumping, beginning with the lowest rate and progressing to the highest.
- **Constant Rate Pumping and Recovery Test:** time drawdown and recovery measurements would be made to estimate aquifer parameters. If possible, nearby wells would also be monitored to obtain interference ground water levels during the test.

GEOSCIENCE would monitor final development by pumping and surging on a part-time basis. Sand content and specific capacity would be monitored to track the advancement of the development process, to ensure that each well is fully developed before installing pressure and conductivity transducers. At the end of the development process, water quality samples for analysis for general mineral and physical properties would be collected. For cost estimating purposes, it is assumed that RBF would be responsible for the water quality laboratory fees and would contract directly with the laboratory.

2.4 Pump Removal, Video and Alignment Surveys

GEOSCIENCE would provide full-time inspection during removal of the test pump, and accumulated sediment from the bottom of the well. A final downhole video survey would be performed to document the post-construction condition of the well. GEOSCIENCE would also provide inspection for an alignment survey of the well, the purpose of which is to measure well straightness, angle and alignment.

GEOSCIENCE would provide inspection of the final wellhead completion to ensure that the well casing, and screen, as well as any required appurtenances are finished as described by the technical specifications and/or well design. The post-construction condition of the well site would also be inspected to ensure that all equipment, materials, and trash have been removed, and that the site has been restored as closely as possible to its original condition.

3.0 OBSERVATION WELL CONSTRUCTION

GEOSCIENCE would provide on-site inspection services during the drilling, construction, and development of three groups of observation wells to be completed in the Dune Sand, 180 Ft, and upper 400 Ft aquifers. This cost estimate assumes that GEOSCIENCE personnel would be onsite on a full-time basis, as the work would be planned to take place during daylight hours, approximately five days per week (i.e., Monday through Friday). These costs do not include preliminary design, permitting, reporting, or project management (i.e., meetings), but are for design and inspection only.

3.1 Onsite Inspection during Drilling, Construction and Development of Observation Wells

Field inspection would be provided on a part-time basis during borehole drilling. Formation samples would be collected as continuous cores, with samples identified as to material type and production potential by visually logging them in the field using the Unified Soil Classification System (USCS). Upon completion of the borehole drilling, GEOSCIENCE personnel would provide full-time onsite inspection of the geophysical borehole logging (i.e., dual induction, temperature and fluid resistivity logs). If subsurface conditions permit, short- and long-normal resistivity, guard or lateral, self potential, and gamma-ray logs would be conducted instead of the dual induction logs.

Using the visual and geophysical logs collected from the borehole, up to nine (9) samples would be selected for mechanical grain size (i.e., sieve) analysis to assess permeability, sand migration potential, and uniformity coefficients. These analyses would be used as a basis for preparing the custom filter pack and well screen design for the well.

Based on results from the mechanical grading analyses, GEOSCIENCE would design the filter pack with a pack to aquifer ratio of between 4 and 20, as well as using Terzaghi's criteria for the movement of fines through the filter pack, and for the permeability of the aquifer and filter pack. Based on lithology, geophysical borehole logs, and mechanical grain size analysis, aquifers would be identified. The final well design would include recommended depth intervals for the well casing and screen, recommended borehole diameter(s), and the proper screen opening size to complement the filter pack design. The recommended design would be submitted to RBF in electronic format for review and comment before implementation in the field.

Full-time inspection would be provided during installation of the casing, screen, filter pack, and annular seal to ensure that all materials are furnished and placed in accordance with the recommended design and technical specifications. Prior to installation, GEOSCIENCE personnel would inspect the filter pack material and the well casing and screen for compliance with the specified well design. As the filter pack and cement seal are being installed, GEOSCIENCE personnel would track the volume placed against the theoretical volume to ensure that there are no voids forming or bridging occurring within the annular space.

GEOSCIENCE would provide full-time inspection during the airlift development process and would closely monitor discharge water turbidity and sand content to track the development progress of the well.

3.2 Mechanical Grading Analysis to Verify Pre-Designed Filter Pack Gradation

Use of a properly designed and installed filter pack will control sand production from the well when pumping. The pre-designed filter pack gradation will be verified based on mechanical grading analysis performed on nine aquifer intervals. The design will be designed based on industry standards regarding pack-to-aquifer ratios. The size of the screen openings would be designed to allow a minimal but acceptable amount of filter pack material to move through the screen. This controlled movement of filter pack material would permit the proper development of the filter pack and near-well zone.

3.3 Observation Well Development and Sampling

GEOSCIENCE would monitor final development of the observation wells by pumping and surging on a part-time basis. Sand content and specific capacity would be monitored to track the advancement of the development process, to ensure that each observation well is fully developed before installing pressure and conductivity transducers. At the end of the development process, water quality samples

for analysis of general minerals and physical properties would be collected. It should be recognized that analytical fees are not included in GEOSCIENCE's costs.

3.4 Pressure and Conductivity Transducer Installation

After development of the newly installed observation wells, each well would be equipped with pressure and conductivity transducers which will allow continuous monitoring of ground water levels and electrical conductivity values during the pumping test and the recovery period. The transducers will remain in the wells after aquifer testing to continue to collect data to evaluate seasonal variations in ground water levels, and water quality.

COST ESTIMATE

The estimated cost for GEOSCIENCE to perform Tasks 1 through 4 of the above scope of work is \$455,305 as detailed in Table 1 (attached), not including the 10% contingency.

Amendment No 1

RBF Consulting
Phase 1 Design and Construction
One Test Slant Well and Three Grouped Observation Wells

PLANNING LEVEL COST ESTIMATE - PHASE 1 DESIGN AND CONSTRUCTION
ONE (1) TEST SLANT WELL AND THREE (3) GROUPED OBSERVATION WELLS FOR OCEAN WATER DESALINATION

Task	Description	Principal Hydrologist	Senior Geohydrologist	Project Geohydrologist	Senior Staff Geohydrologist	Staff Geohydrologist	Technical Illustrator	Project Administrator	Clerical	Labor	Reimbursable Expenses ¹	Total Cost
Hourly Rate:		\$280	\$195	\$160	\$125	\$115	\$105	\$95	\$85			
1.0 TEST SLANT & OBSERVATION WELL DESIGN AND BID SUPPORT												
1.1	Revise Existing Detailed Plans and Specifications for One (1) Test Slant Well - Dual Rotary Drilling Method [Assumes 820 lineal ft well]	16	54	24			104			\$ 29,770	\$ 250	\$ 30,020
1.2	Prepare Detailed Plans and Specifications for Three (3) Observation Wells - Sonic Drilling Method [Assumes Grouped/Clustered Wells]	4	48	12			92		4	\$ 22,400	\$ 500	\$ 22,900
Subtotal - Task 1		20	102	36	0	0	196	0	4	\$ 52,170	\$ 750	\$ 52,920
2.0 TEST SLANT WELL CONSTRUCTION - ONE (1) WELL UP TO 820 LINEAL FT ^{2,4}												
2.1	Onsite Inspection during Test Slant Well Drilling, Construction and Development [Assumes 130 field days, 12 in. x 20 in. x 820 ft well]	50	148	1,280						\$ 247,660	\$ 37,500	\$ 285,160
2.2	Mechanical Grading Analysis to Verify Pre-Designed Filter Pack Gradation [Assumes 10 samples]	1	2		18					\$ 2,920	\$ 150	\$ 3,070
2.3	Onsite Inspection during Test Pump Installation and Aquifer Testing - Step Drawdown and 5 Day Constant Rate with Recovery, Water Quality Sampling (General Mineral and Physical Properties) [Assumes 7 field days plus travel]	16	24	96						\$ 24,520	\$ 2,350	\$ 26,870
2.4	Onsite Inspection during Pump Removal, Video and Gyroscopic Survey [Assumes 2 field days - part time]	4	24							\$ 5,800	\$ 750	\$ 6,550
Subtotal - Task 2		71	198	1,376	18	0	0	0	0	\$ 280,900	\$ 40,750	\$ 321,650
3.0 OBSERVATION WELL CONSTRUCTION - THREE (3) GROUPS OF OBSERVATION WELLS ³												
3.1	Onsite Inspection during Sonic Drilling, Geophysical Borehole Logging and Construction of Observation Wells [Assumes 18 field days]	12	24	216						\$ 42,600	\$ 4,500	\$ 47,100
3.2	Mechanical Grading Analysis [Assumes 9 sample intervals, 3 from each borehole]	1	2		16					\$ 2,670	\$ 150	\$ 2,820
3.3	Onsite Inspection during Development of Observation Wells and Sampling for General Minerals and Physical Properties [Assumes 8 field days]	2		96						\$ 15,920	\$ 4,355	\$ 20,275
3.4	Install Pressure and Conductivity Transducers in Observation Wells [Assumes 1 field day plus 1 day travel]	1		24	24					\$ 7,120	\$ 3,420	\$ 10,540
Subtotal - Task 3		16	26	336	40	0	0	0	0	\$ 68,310	\$ 12,425	\$ 80,735
TOTAL HOURS AND COSTS - TASKS 1 - 3		107	326	1,748	58	0	196	0	4	\$ 401,380	\$ 53,925	\$ 455,305
10% CONTINGENCY										\$ 40,138	\$ 5,393	\$ 45,531

Notes:

- ¹ Assumes 12 hour days during field work. Reimbursable expenses include report reproduction, mailing charges, field equipment use, per diem and mileage.
- ² Assumes all discharges will be to the nearby subsurface infiltration system or sanitary sewer system and that water quality sampling and that water quality analysis will be provided by others.
- ³ Tasks 2.3 and 3.3 do not include water quality analytical fees or field equipment rentals such as YSI 556 Multi-Parameter Meter; rental of pressure transducers, or field filters.
- ⁴ These costs do not include preliminary design, permitting, reporting, or project management (i.e., meeting)—but are for design and inspection only.

AGREEMENT BETWEEN CONSULTANT AND SUBCONSULTANT

AGREEMENT ENTERED INTO AT San Diego, on this date of 7/29/13 by and between RBF Consulting ("Consultant") and Geoscience Support Services Inc. ("Subconsultant").

Attention: Dennis Williams

Project: Monterey Peninsula Water Supply Project

Description of Subconsultant's Services: Subconsultant shall provide as-needed geohydrologic engineering services for exploratory geotechnical borings and design of the slant test well. The detailed scope and fee for these services are presented in Exhibit A and B, respectively.

Payments: Subconsultant shall submit monthly invoices to Consultant using the Subconsultant Invoice Form, attached hereto as Exhibit C. Consultant shall bill client monthly on account of Subconsultant's services and shall pay Subconsultant within fourteen days of the time consultant receives payment from client on account thereof. The not-to-exceed limit for this contract is \$332,770, including slant test well design (\$52,920) and geohydrological investigation tasks (\$279,850).

Approved and accepted in accordance with the General Terms of Agreement for Subconsulting Services contained in paragraphs one (1) through thirteen (13) herewith.

RBF CONSULTING

By: R. B. Craig
(Signature)

Ren B Craig
(Type/Print Name)

Sr. Vice President
(Title)

Date: 5/20/2013

RBF Job No: 136410

Geoscience Support Services Inc.

By: [Signature]
(Signature)

Dennis E. Williams
(Type/Print Name)

President
(Title)

Date: 02-Aug-2013

P.O. No: _____

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 Alton Parkway, Irvine, CA 92618-2027 • P.O. Box 57057, Irvine, CA 92619-7057 • 949.472.3505 • FAX 949.472.8373
Offices located throughout California, Arizona & Nevada • www.RBF.com



GENERAL TERMS OF AGREEMENT FOR SUBCONSULTING SERVICES

Consultant and Subconsultant agree that the following provisions shall be part of this agreement:

1. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Consultant and Subconsultant.
2. This agreement shall not be assigned by either Consultant or Subconsultant without the prior written consent of the other.
3. This agreement contains the entire agreement between Consultant and Subconsultant relating to the project and the provision of services to the project. Any prior agreements, promises, negotiations or representations not expressly set forth in this agreement are of no force or effect. Subsequent modifications to this agreement shall be in writing and signed by both Consultant and Subconsultant.
4. This agreement shall be governed by and construed in accordance with the laws of the State of California.
5. Consultant and Subconsultant agree to cooperate with each other in order to fulfill their responsibilities and obligations under this agreement. Both Consultant and Subconsultant shall endeavor to maintain good working relationships among members of the project team.
6. Subconsultant shall perform services as an independent contractor and shall perform the services provided for in this agreement in accordance with generally accepted standards of professional practice in effect at the time of performance.
7. Unless provided otherwise by the terms of Subconsultant's Services, Subconsultant shall submit monthly invoices to Consultant. Subconsultant recognizes that his or her invoices will be presented by Consultant to the project client and that Consultant will pay Subconsultant the amount due for services rendered and expenses incurred within fourteen (14) calendar days after Consultant is paid by the project client. Nothing contained in this paragraph shall constitute a waiver or release of Subconsultant's mechanic lien rights.
8. Before any services are provided under this agreement, Subconsultant shall procure and maintain in effect insurance coverage in amounts not less than set forth below.
 - (a) Workers' Compensation and Employer's Liability: as required by the laws of the State of California.
 - (b) General Liability: commercial general liability insurance for personal and bodily injury, including death and property damage, on an occurrence basis, in the amount of \$2,000,000 combined single limit each occurrence and in aggregate.
 - (c) Automobile Liability: automobile liability for personal and bodily injury, including death and property damage, in the amount of \$1,000,000 for each accident.
 - (d) Professional Liability: professional liability insurance for damages incurred by reason of any actual or alleged negligent act, error or omission by Subconsultant in the amount of \$1,000,000 each claim and annual aggregate.
 - (e) Certificates: Subconsultant shall provide certificates of insurance evidencing coverage required above. Each certificate shall provide that the coverage afforded shall not be cancelled or ordered reduced by the Subconsultant, except with at least thirty (30) days' prior written notice to the Consultant. Should this occur, Subconsultant shall procure and furnish to Consultant prior to such effective date new certificates conforming to the above coverage requirements. Subconsultant shall not have the right to receive any payment under this agreement until all insurance certificates are received by Consultant.
9. Consultant and Subconsultants agree, to the extent permitted by law, to indemnify and hold harmless each other, their officers, directors and employees from and against all claims, losses, demands, damages or costs, including attorneys fees that are ultimately determined by a court to be caused by and only the extent of, the actual negligent acts, errors or omissions of either Consultant or Subconsultant or anyone else for whom Consultant or Subconsultant is liable, arising out of the performance of this agreement.
10. Consultant may terminate Subconsultant's performance under this agreement, with or without cause, upon written notice. Consultant shall compensate Subconsultant for performance of services through the period prior to termination, plus reasonable termination expenses, provided Subconsultant is not in default.
11. In the event of any litigation arising from or related to the services provided under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.
12. If any provision of this agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect and are binding on Consultant and Subconsultant.
13. In an effort to resolve any conflicts between Consultant and Subconsultant arising out of or relating to the performance of this agreement, Consultant and Subconsultant agree that all disputes between them arising out of or relating to this agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. This dispute resolution provision shall not preclude either party from filing a legal action in small claims court if the amount in dispute is within the jurisdiction of the small claims court, nor does it preclude or limit the right to perfect or enforce applicable mechanic's lien or stop notice remedies.

General Terms

Subconsultant Initials: 

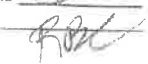
Consultant Initials: 

EXHIBIT A

GEOSCIENCE

February 6, 2013

Mr. Sarp Sekeroglu, P.E.
Principal Engineer
RBF Consulting
3180 Imjin Road
Marina, CA 93933

**Re: Proposal to Provide Geohydrologic Services – Test Slant Well and Observation Wells
Monterey Peninsula Water Supply Project**

Dear Sarp:

As per your request, GEOSCIENCE is submitting the following scope of work and costs to provide geohydrologic services related to drilling, construction, development and testing of an 820 ft test slant well that is to be located adjacent to the beach near Marina, California. The work is understood to be part of the Monterey Peninsula Water Supply Project (MPWSP). In addition, our costs include field inspection services during drilling, construction, and development of three groups of observation wells planned to be located near the test slant well. Transducers will be installed in each well for the purpose of collecting ground water level and water quality information during the short- and long-term testing to that is to be conducted on the test slant well.

If you have any questions or comments, please do not hesitate to contact me at your convenience.

Sincerely,



Dennis E. Williams, Ph.D.
President
encl.

GEOSCIENCE SUPPORT SERVICES INCORPORATED
Ground Water Resources Development
P.O. Box 220, Claremont, CA 91711
T 909-451-6650
F 909-451-6638

**RBF CONSULTING
MONTEREY PENINSULA WATER SUPPLY PROJECT
SCOPE OF WORK**

1.0 TEST SLANT AND OBSERVATION WELL DESIGN

1.1 Test Slant Well – Revise Existing Detailed Technical Specifications and Drawings

GEOSCIENCE would revise existing technical specifications and construction drawings for drilling, construction, and testing of one test slant well using the dual rotary drilling method. The technical specifications and construction drawings would be bundled with RBF's front-end documents to complete the bid package. GEOSCIENCE would also prepare a detailed bid schedule, to be included with the bid package, with specific line items showing units and unit quantities for the construction of the well. Items included in the technical specifications would include (but are not necessarily limited to) the following:

- Well location, angle, depth and dimensions;
- Expected geohydrologic conditions;
- Permits to be acquired by the contractor;
- Compliance with discharge requirements, as necessary;
- Job conditions (e.g., noise suppression, drilling waste, runoff management, power, lighting, water, security, sanitation and work damage);
- Mobilization, demobilization, and cleanup;
- Potential drilling problems;
- Equipment, materials, and records to be furnished by the contractor;
- Records to be kept by the contractor;
- Drilling and construction procedures;
- Development procedures;
- Aquifer pumping and recovery tests;
- Water quality sampling and analysis;
- Downhole video camera and alignment surveys;
- Equipping with a designed submersible pump and instrumentation for long-term testing; and
- Well cover and final inspection.

The drawings would be prepared as 11" x 17" sheets for attachment to the technical specifications.

1.2 Observation Wells – Prepare Detailed Technical Specifications and Drawings

GEOSCIENCE would prepare the technical specifications and construction drawings for drilling, construction and development of the grouped observation wells that are anticipated to be drilled using the sonic drilling method, and to a maximum depth of approximately 400 ft below ground surface (bgs) into the upper portion of the 400 Ft Aquifer. Other aquifers penetrated would be the Dune Sand, and the 180 Ft Aquifer. The technical specifications and construction drawings would be bundled with RBF's front-end documents to complete the bid package. Additionally, GEOSCIENCE would prepare a detailed bid schedule, to be included with the bid package, with specific line items showing units and unit quantities for the construction of the well. Items included in the technical specifications would include (but are not necessarily limited to) the following:

- Well location, depth and dimensions;
- Expected geohydrologic conditions;
- Permits to be acquired by the contractor;
- Compliance with discharge requirements, as necessary;
- Job conditions (e.g., noise suppression, drilling waste, runoff management, power, lighting, water, security, sanitation and work damage);
- Mobilization, demobilization, and cleanup;
- Potential drilling problems;
- Equipment, materials, and records to be furnished by the contractor;
- Records to be kept by the contractor;
- Drilling and construction procedures;
- Development procedures;
- Installation of pressure transducers to monitor water levels; and
- Observation well covers and final inspection.

The drawings would be prepared as 11" x 17" sheets for attachment to technical specifications.

2.0 SLANT WELL CONSTRUCTION

GEOSCIENCE would provide on-site inspection services during the drilling, construction, and development of the test slant well. This cost estimate assumes the work would be conducted primarily on a full-time basis as the work would take place during daylight hours only, seven days per week. These costs do not include preliminary design, permitting, reporting, or project management (i.e., meetings), but are for design and inspection only.

2.1 Onsite Inspection during Drilling, Construction and Development of Test Slant Well

Field inspection would be provided on a part-time basis during borehole drilling. Formation samples would be collected at 10 ft intervals (or more frequently depending on the stratigraphy encountered). Samples would be identified as to material type and production potential by visually logging them in the field using the Unified Soil Classification System (USCS).

Using visual methods, up to ten (10) samples would be selected from materials collected from the borehole for mechanical grain size (i.e., sieve) analysis to assess permeability, sand migration potential, and uniformity coefficients. These analyses would be used as a basis for preparing the design for the graded filter pack and well screen.

Based on results from the mechanical grading analyses, GEOSCIENCE would design the filter pack with a pack to aquifer ratio of between 4 and 20, as well as using Terzaghi's criteria for the movement of fines through the filter pack, and for the permeability of the aquifer and filter pack. Based on mechanical grain size analysis, targeted aquifers would be identified. The final well design would include recommended depth intervals and diameters for the well casing and screen, recommended borehole diameter(s), and the proper screen opening size to complement the filter pack design. The recommended design would be submitted to RBF in electronic format for review and comment before implementation in the field.

Full-time inspection would be provided during installation of the casing, screen, appurtenances, filter pack, and annular seal to ensure that all materials are furnished and placed in accordance with the recommended design and technical specifications. Prior to installation, GEOSCIENCE personnel would inspect the filter pack material and the well casing and screen for compliance with the specified well design. As the filter pack and cement seal are being installed, GEOSCIENCE personnel would track the volume placed against the theoretical volume to ensure that there are no voids forming or bridging occurring within the annular space.

Initial well development by airlifting and swabbing is an extremely important component of the well completion and development process. GEOSCIENCE would provide full-time inspection during the airlift development process and would closely monitor discharge water turbidity and sand content to track the development progress of the well.

GEOSCIENCE would monitor final development by pumping and surging on a part-time basis. Tests for sand content and specific capacity would be performed frequently to measure the advancement of the development process and to ensure that the well is fully developed before beginning the aquifer pumping tests.

2.2 Mechanical Grading Analysis to Verify Pre-Designed Filter Pack Gradation

Use of a properly designed and installed filter pack will control sand production from the well when pumping. The pre-designed filter pack gradation would be verified based on mechanical grading analysis performed on ten aquifer intervals. The design will be designed based on industry standards regarding pack-to-aquifer ratios. The size of the screen openings will be designed to allow a minimal but acceptable amount of filter pack material to move through the screen. This controlled movement of filter pack material would permit the proper development of the filter pack and near-well zone.

2.3 Aquifer Pumping Tests

Once the well development process is considered complete, aquifer pumping tests would be performed to determine well and aquifer characteristics. The network of nearby observation wells would be monitored during constant rate testing to provide interference data and enable more accurate estimation of aquifer parameters. The following aquifer pumping tests would be performed:

- Step Drawdown Pumping Test: time drawdown measurements would be made to determine specific capacity and well efficiency relationships that are necessary to calculate the optimal production rate and pump setting. Typically three to four rates are selected for pumping, beginning with the lowest rate and progressing to the highest.
- Constant Rate Pumping and Recovery Test: time drawdown and recovery measurements would be made to estimate aquifer parameters. If possible, nearby wells would also be monitored to obtain interference ground water levels during the test.

GEOSCIENCE would monitor final development by pumping and surging on a part-time basis. Sand content and specific capacity would be monitored to track the advancement of the development process, to ensure that each well is fully developed before installing pressure and conductivity transducers. At the end of the development process, water quality samples for analysis for general mineral and physical properties would be collected. For cost estimating purposes, it is assumed that RBF would be responsible for the water quality laboratory fees and would contract directly with the laboratory.

2.4 Pump Removal, Video and Alignment Surveys

GEOSCIENCE would provide full-time inspection during removal of the test pump, and accumulated sediment from the bottom of the well. A final downhole video survey would be performed to document the post-construction condition of the well. GEOSCIENCE would also provide inspection for an alignment survey of the well, the purpose of which is to measure well straightness, angle and alignment.

GEOSCIENCE would provide inspection of the final wellhead completion to ensure that the well casing, and screen, as well as any required appurtenances are finished as described by the technical specifications and/or well design. The post-construction condition of the well site would also be inspected to ensure that all equipment, materials, and trash have been removed, and that the site has been restored as closely as possible to its original condition.

3.0 OBSERVATION WELL CONSTRUCTION

GEOSCIENCE would provide on-site inspection services during the drilling, construction, and development of three groups of observation wells to be completed in the Dune Sand, 180 Ft, and upper 400 Ft aquifers. This cost estimate assumes that GEOSCIENCE personnel would be onsite on a full-time basis, as the work would be planned to take place during daylight hours, approximately five days per week (i.e., Monday through Friday). These costs do not include preliminary design, permitting, reporting, or project management (i.e., meetings), but are for design and inspection only.

3.1 Onsite Inspection during Drilling, Construction and Development of Observation Wells

Field inspection would be provided on a part-time basis during borehole drilling. Formation samples would be collected as continuous cores, with samples identified as to material type and production potential by visually logging them in the field using the Unified Soil Classification System (USCS). Upon completion of the borehole drilling, GEOSCIENCE personnel would provide full-time onsite inspection of the geophysical borehole logging (i.e., dual induction, temperature and fluid resistivity logs). If subsurface conditions permit, short- and long-normal resistivity, guard or lateral, self potential, and gamma-ray logs would be conducted instead of the dual induction logs.

Using the visual and geophysical logs collected from the borehole, up to nine (9) samples would be selected for mechanical grain size (i.e., sieve) analysis to assess permeability, sand migration potential, and uniformity coefficients. These analyses would be used as a basis for preparing the custom filter pack and well screen design for the well.

Based on results from the mechanical grading analyses, GEOSCIENCE would design the filter pack with a pack to aquifer ratio of between 4 and 20, as well as using Terzaghi's criteria for the movement of fines through the filter pack, and for the permeability of the aquifer and filter pack. Based on lithology, geophysical borehole logs, and mechanical grain size analysis, aquifers would be identified. The final well design would include recommended depth intervals for the well casing and screen, recommended borehole diameter(s), and the proper screen opening size to complement the filter pack design. The recommended design would be submitted to RBF in electronic format for review and comment before implementation in the field.

Full-time inspection would be provided during installation of the casing, screen, filter pack, and annular seal to ensure that all materials are furnished and placed in accordance with the recommended design and technical specifications. Prior to installation, GEOSCIENCE personnel would inspect the filter pack material and the well casing and screen for compliance with the specified well design. As the filter pack and cement seal are being installed, GEOSCIENCE personnel would track the volume placed against the theoretical volume to ensure that there are no voids forming or bridging occurring within the annular space.

GEOSCIENCE would provide full-time inspection during the airlift development process and would closely monitor discharge water turbidity and sand content to track the development progress of the well.

3.2 Mechanical Grading Analysis to Verify Pre-Designed Filter Pack Gradation

Use of a properly designed and installed filter pack will control sand production from the well when pumping. The pre-designed filter pack gradation will be verified based on mechanical grading analysis performed on nine aquifer intervals. The design will be designed based on industry standards regarding pack-to-aquifer ratios. The size of the screen openings would be designed to allow a minimal but acceptable amount of filter pack material to move through the screen. This controlled movement of filter pack material would permit the proper development of the filter pack and near-well zone.

3.3 Observation Well Development and Sampling

GEOSCIENCE would monitor final development of the observation wells by pumping and surging on a part-time basis. Sand content and specific capacity would be monitored to track the advancement of the development process, to ensure that each observation well is fully developed before installing pressure and conductivity transducers. At the end of the development process, water quality samples

for analysis of general minerals and physical properties would be collected. It should be recognized that analytical fees are not included in GEOSCIENCE's costs.

3.4 Pressure and Conductivity Transducer Installation

After development of the newly installed observation wells, each well would be equipped with pressure and conductivity transducers which will allow continuous monitoring of ground water levels and electrical conductivity values during the pumping test and the recovery period. The transducers will remain in the wells after aquifer testing to continue to collect data to evaluate seasonal variations in ground water levels, and water quality.

COST ESTIMATE

The estimated cost for GEOSCIENCE to perform Tasks 1 through 4 of the above scope of work is \$455,305 as detailed in Table 1 (attached), not including the 10% contingency.

EXHIBIT B

PLANNING LEVEL COST ESTIMATE - PHASE 1 DESIGN AND CONSTRUCTION
ONE (1) TEST SLANT WELL AND THREE (3) GROUPED OBSERVATION WELLS FOR OCEAN WATER DESALINATION

ONE (1) TEST SLANT WELL AND THREE (3) GROUPED OBSERVATION WELLS FOR OCEAN WATER DESALINATION														
Task	Description	Hourly Rate ¹	Principal Hydrologist \$280	Senior Geohydrologist \$195	Project Geohydrologist \$160	Senior Staff Geohydrologist \$125	Staff Geohydrologist \$115	Technical Illustrator \$105	Project Administrator \$95	Clerical \$85	Labor	Reimbursable Expenses ¹	Total Cost	
1.0 TEST SLANT & OBSERVATION WELL DESIGN AND BID SUPPORT														
1.1	Revise Existing Detailed Plans and Specifications for One (1) Test Slant Well + Dual Rotary Drilling Method (Assumes 820 lineal ft well)		16	54	34			104			\$ 29,770	\$ 250	\$ 30,020	
1.2	Prepare Detailed Plans and Specifications for Three (3) Observation Wells + Sonic Drilling Method (Assumes Grouped/Clustered Wells)		4	48	12			92		4	\$ 22,400	\$ 500	\$ 22,900	
Subtotal - Task 1			20	102	36	0	0	196	0	4	\$ 52,170	\$ 750	\$ 52,920	
2.0 TEST SLANT WELL CONSTRUCTION - ONE (1) WELL UP TO 820 LINEAL FT ^{2,3}														
2.1	Onsite Inspection during Test Slant Well Drilling, Construction and Development (Assumes 130 field days, 12 in. x 20 in. x 820 ft well)		50	148	1,280						\$ 247,660	\$ 37,500	\$ 285,160	
2.2	Mechanical Grading Analysis to Verify Pre-Designed Filter Pack Gradation (Assumes 10 samples)		1	2		18					\$ 2,920	\$ 150	\$ 3,070	
2.3	Onsite Inspection during Test Pump Installation and Aquifer Testing - Step Drawdown and 5 Day Constant Rate with Recovery, Water Quality Sampling (General Mineral and Physical Properties) (Assumes 7 field days plus travel)		16	34	56						\$ 24,520	\$ 2,350	\$ 26,870	
2.4	Onsite Inspection during Pump Removal, Video and Gyroscopic Survey (Assumes 2 field days - part time)		4	34							\$ 5,800	\$ 750	\$ 6,550	
Subtotal - Task 2			71	198	1,376	18	0	0	0	0	\$ 280,900	\$ 40,750	\$ 321,650	
3.0 OBSERVATION WELL CONSTRUCTION - THREE (3) GROUPS OF OBSERVATION WELLS ³														
3.1	Onsite Inspection during Sonic Drilling, Geophysical Borehole Logging and Construction of Observation Wells (Assumes 18 field days)		12	24	216						\$ 42,600	\$ 4,500	\$ 47,100	
3.2	Mechanical Grading Analysis (Assumes 9 sample intervals, 3 from each borehole)		1	2		16					\$ 2,570	\$ 150	\$ 2,820	
3.3	Onsite Inspection during Development of Observation Wells and Sampling for General Minerals and Physical Properties (Assumes 8 field days)		2		96						\$ 15,920	\$ 4,355	\$ 20,275	
3.4	Install Pressure and Conductivity Transducers in Observation Wells (Assumes 1 field day plus 1 day travel)		1		24	24					\$ 7,120	\$ 3,420	\$ 10,540	
Subtotal - Task 3			16	26	336	40	0	0	0	0	\$ 68,310	\$ 12,425	\$ 80,735	
TOTAL HOURS AND COSTS - TASKS 1 - 3			107	326	1,748	58	0	196	0	4	\$ 401,380	\$ 53,925	\$ 455,305	
10% CONTINGENCY												\$ 40,138	\$ 5,393	\$ 45,531

Notes:

- ¹ Assumes 12 hour days during field work. Reimbursable expenses include report reproduction, mailing charges, field equipment use, per diem and mileage.
- ² Assumes all discharges will be to the nearby subsurface irrigation system or sanitary sewer system and that water quality sampling and that water quality analysis will be provided by others.
- ³ Tasks 2.3 and 3.3 do not include water quality analytical fees or field equipment rentals such as YSI 555 Multi-Parameter Meter, rental of pressure transducers, or field filters.
- ⁴ These costs do not include preliminary design, permitting, reporting, or project management (i.e., meeting)—but are for design and inspection only.

EXHIBIT C

**PRELIMINARY GEOHYDROLOGICAL INVESTIGATION
SIX CEMEX AREA BOREHOLES TO 350 FT, AND EIGHT (PHASE I AND II) MOSS LANDING/POTRERO ROAD BOREHOLES TO 200 FT
MONTEREY, CALIFORNIA**

Task Description	GEOSCIENCE Support Services, Inc.							Reimbursable		
	Principal Hydrologist	Senior Geohydrologist	Project Geohydrologist	Senior Staff Geohydrologist	Staff Geohydrologist	Technical Illustrator	Clerical	Labor	Expenses ¹	Total Cost
1.0 PROJECT PREPARATION	<i>Hourly Rate:</i>	\$280	\$195	\$150	\$125	\$115	\$105	\$85		
1.1 Kick off meeting in Monterey area.	12	12						\$ 5,700	\$ 750	\$ 6,450
1.2 Project preparation, set up and initiation.	2	24						\$ 5,240	\$	\$ 5,240
1.3 Prepare project work plan to encompass investigative boreholes, monitoring wells and test slant well including long-term monitoring and testing, reporting and modeling updates. Assumes response to HWG comments and three revisions.	16	60	36	40		40	16	\$ 32,500	\$ 750	\$ 33,250
1.4 Prepare technical specifications for sonic borehole drilling, logging and destruction.	1	12		12		4	2	\$ 4,710	\$ 150	\$ 4,860
1.5 Conference calls. Assumes the project will take two months, with eight (8) conference calls during that time.	8	8						\$ 3,800	\$	\$ 3,800
1.6 Progress/summary meeting at end of project in Monterey area.	12	12						\$ 5,700	\$ 750	\$ 6,450
Subtotal - Project Preparation	51	128	36	52	0	44	18	\$ 57,650	\$ 2,400	\$ 60,050
2.0 FIELD INSPECTION - CEMEX AREA (SIX BOREHOLES)²										
2.1 Onsite inspection during sonic drilling, geophysical borehole logging and destruction. Assumes borehole depths of 350 ft.	36	192	180					\$ 75,320	\$ 8,500	\$ 84,820
2.2 Mechanical grading analysis. Assumes eight (8) sample intervals from each borehole.	8	8	12	12	48			\$ 12,740	\$ 500	\$ 13,240
2.3 Prepare summary report.	8	32		24	32	12	8	\$ 17,100	\$ 250	\$ 17,350
Subtotal - CEMEX Area Boreholes	52	232	192	36	80	12	8	\$ 105,160	\$ 9,250	\$ 114,410
3.0 FIELD INSPECTION - MOSS LANDING PHASE I (FIVE BOREHOLES)²										
3.1 Onsite inspection during sonic drilling, geophysical borehole logging and destruction. Assumes borehole depths of 200 ft.	20	81	108					\$ 38,675	\$ 5,000	\$ 43,675
3.2 Mechanical grading analysis. Assumes five (5) sample intervals from each borehole.	8	4		6	25			\$ 5,245	\$ 500	\$ 5,745
3.3 Prepare summary report.	8	32		24	32	12	8	\$ 17,100	\$ 250	\$ 17,350
Subtotal - Moss Landing Phase I	31	117	108	30	57	12	8	\$ 61,020	\$ 5,750	\$ 66,770
TOTAL HOURS AND COST - CEMEX AND ML PHASE I ONLY	134	477	336	118	137	68	34	\$ 224,830	\$ 17,400	\$ 242,230
4.0 FIELD INSPECTION - MOSS LANDING PHASE II (OPTIONAL - THREE BOREHOLES)²										
4.1 Onsite inspection during sonic drilling, geophysical borehole logging and destruction. Assumes borehole depths of 200 ft.	8	42	72					\$ 21,950	\$ 3,000	\$ 24,950
4.2 Mechanical grading analysis. Assumes five (5) sample intervals from each borehole.	2	3		4	15			\$ 3,370	\$ 500	\$ 3,870
4.3 Prepare summary report (assumes work will be combined with Phase I report)	4	16		12	16	6	4	\$ 8,550	\$ 250	\$ 8,800
Subtotal - Moss Landing Phase II (Optional)	14	61	72	16	31	6	4	\$ 33,870	\$ 3,750	\$ 37,620
TOTAL HOURS AND COST - CEMEX, ML PHASES I & II	148	538	408	134	168	74	38	\$ 258,700	\$ 21,150	\$ 279,850

Notes:

- ¹ Reimbursable expenses include report reproduction, mailing charges, per diem or mileage and field equipment rental
² Assumes daylight working hours only (7AM to 7PM), seven days per week, ten days on and four days off each rotation.



Subconsultant Invoice Transmittal

Please attach this cover sheet to all invoices and transmittal letters. Contact Project Manager if you have any questions.

Send all invoices to: **Accounts Payable**
RBF Consulting/A Baker Company
14725 Alton Parkway
Irvine, CA 92618-2027

Or e-mail to: **tloehr@rbf.com**

Following information to be completed by subconsultant: **[NOTE: Please complete all fields.]**

Invoice Date:	_____		
Invoice Number:	_____		
Invoice Amount:	_____	Total ITD Invoiced:	_____
Less Retention (if applicable):	_____	Total ITD Retainage	_____
Total Payable this invoice:	_____		
Dates Work Performed	From: _____	To:	_____

Note: If multiple tasks are associated with an invoice, either submit a copy of this sheet for each task and dollar amount, or attach a sheet with a list of task numbers and corresponding dollar amounts.

Following information to be completed by Project Manager: **[NOTE: Please complete all fields.]**

Project Name:	Monterey Peninsula Water Supply Project
Subconsultant Name:	Geoscience Support Services, Inc.
Subconsultant Number:	29229
Subconsultant Total Not-to-Exceed:	\$332,770
Project Manager:	Sarp Sekeroglu
Ultimate Client:	California American Water
Project Number:	136410
Organization:	R25.24.SD.FD
Expenditure:	Sub-Professional
Task:	004.800
RBF Entity:	5A
Payment Terms:	PWP [PWP, N30, N45, N60, N90]

If this is a minority owned business, check appropriate box:

- | | |
|---|--|
| <input type="checkbox"/> SDB – Small Disadvantaged Business | <input type="checkbox"/> VOSB – Veteran-Owned Small Business |
| <input type="checkbox"/> WOSB – Woman-Owned Small Business | <input type="checkbox"/> Other _____ |

SUPPLEMENT to SUBCONSULTANT AGREEMENT
AMENDMENT NO. 4
TO
SUBCONSULTANT AGREEMENT
FOR
PROFESSIONAL SERVICES

THIS AGREEMENT, entered into this 1st day of October, 2014, hereinafter referred to as Amendment No. 4, by and between RBF Consulting, located at 9755 Clairemont Mesa Blvd. San Diego, CA, 92124, hereinafter referred to as "RBF", and Geoscience Support Services Inc., located at P.O. Box 220, Claremont, CA, 91711, hereinafter referred to as "SUBCONSULTANT".

WHEREAS, RBF and SUBCONSULTANT have entered into an agreement on November 12, 2012 (hereinafter referred to as Original Agreement) for as-needed geotechnical engineering services, for the Monterey Peninsula Water Supply Project (MPWSP) Test Slant Well.

WHEREAS, RBF desires to amend the Original Agreement to have SUBCONSULTANT perform additional professional and technical services, and SUBCONSULTANT desires to perform such services,

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained, and intending to be legally bound hereby, the parties hereto agree as follows:

I. SCOPE OF SERVICES

In addition to technical services specified in the original Agreement, SUBCONSULTANT shall perform in a proper manner, satisfactory to RBF and in accordance with recognized codes of practice, the design services defined below.

Task 8081 (CEMEX Site): Provide construction support services for test slant well facilities at the CEMEX Site, including, but not limited to (refer to Attachments):

- Test Slant Well preparation;
- Test Slant Well construction and testing;
- Monitoring Wells preparation;
- Monitoring Wells construction and testing;
- Water quality data analysis;
- Project management; and
- Additional Tasks requested by RBF / Cal-Am.

Task 8082 (Potrero Site): This task cannot be billed until authorized by RBF. Provide design services for the construction of a test slant well and monitoring wells at the Potrero Road Parking Lot Site (similar design drawings to CEMEX Site).

II. COMPENSATION AND PAYMENT

For satisfactory performance of the services in accordance with the recognized Codes of Practice as described above, the total SUBCONSULTANT not-to-exceed (NTE) limit is increased by \$973,917 by this amendment. All other terms and conditions for compensation and payment shall be in accordance with the Original Agreement.

III. TERMS AND CONDITIONS

All other terms and conditions of the Original Agreement shall remain in effect, unless otherwise specified herein. This Amendment addresses SUBCONSULTANT costs up to February 28, 2015.

IV. ENTIRE AGREEMENT

Amendment No. 4 and the Original Agreement constitute the whole agreement between the parties with respect to the subject matter contained herein and there are no terms other than those contained therein. No modification or amendment of this Amendment No. 4 shall be valid unless in writing and signed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives have executed this Amendment No. 4 as of the date first written above.


RBF Consulting:

Geoscience Support Services, Inc.:

By:

Date:


Title:


21/Nov/14
SR VICE PRESIDENT

By:

Date:

Title:


18-NOV-14
President

SUPPLEMENT to SUBCONSULTANT AGREEMENT
AMENDMENT NO. 5
TO
SUBCONSULTANT AGREEMENT
FOR
PROFESSIONAL SERVICES

THIS AGREEMENT, entered into this 24th day of December, 2014, hereinafter referred to as Amendment No. 5, by and between RBF Consulting, located at 9755 Clairemont Mesa Blvd. San Diego, CA, 92124, hereinafter referred to as "RBF", and Geoscience Support Services Inc., located at P.O. Box 220, Claremont, CA, 91711, hereinafter referred to as "SUBCONSULTANT".

WHEREAS, RBF and SUBCONSULTANT have entered into an agreement on November 12, 2012 (hereinafter referred to as Original Agreement) for as-needed geotechnical engineering services, for the Monterey Peninsula Water Supply Project (MPWSP) Test Slant Well.

WHEREAS, RBF desires to amend the Original Agreement to have SUBCONSULTANT perform additional professional and technical services, and SUBCONSULTANT desires to perform such services,

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained, and intending to be legally bound hereby, the parties hereto agree as follows:

I. SCOPE OF SERVICES

In addition to technical services specified in the Original Agreement and Amendment No. 4, SUBCONSULTANT shall perform in a proper manner, satisfactory to RBF and in accordance with recognized codes of practice, the design services defined below.

Task 8081 (CEMEX Site): Provide construction support services for offsite monitoring well facilities in association with the test slant well facilities at the CEMEX Site, including, but not limited to (refer to attachments):

- MSHA Training
- MW-5 and MW-6 monitoring wells preparation;
- Monitoring wells construction and testing;
- Water quality data analysis;
- Coordination with quality laboratory and sample delivery;
- Purchase and install pressure and conductivity transducers for offsite wells; and
- Additional Tasks requested by RBF / Cal-Am.

II. COMPENSATION AND PAYMENT

For satisfactory performance of the services in accordance with the recognized Codes of Practice as described above, this Amendment No. 5 increases the SUBCONSULTANT not-to-exceed (NTE) limit for Task 8081 by \$206,838. Therefore the total NTE limit for Task 8081 is now \$1,180,755 (includes \$973,917 from Amendment No. 4). All other terms and conditions for compensation and payment shall be in accordance with the Original Agreement.

III. TERMS AND CONDITIONS

All other terms and conditions of the Original Agreement shall remain in effect, unless otherwise specified herein. This Amendment addresses SUBCONSULTANT costs up to March 31, 2015.

IV. ENTIRE AGREEMENT

Amendment No. 5 and the Original Agreement constitute the whole agreement between the parties with respect to the subject matter contained herein and there are no terms other than those contained therein. No modification or amendment of this Amendment No. 5 shall be valid unless in writing and signed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives have executed this Amendment No. 5 as of the date first written above.

RBF Consulting:

Geoscience Support Services, Inc.:

By:

Date:

Title: SR VICE PRESIDENT

By:

Date:

Title: VICE PRESIDENT

TABLE 1

PLANNING LEVEL COST ESTIMATE - ADDITION OF REQUIRED MSHA TRAINING COURSES
AND COSTS ASSOCIATED WITH ADDITION OF TWO (2) OFF-SITE OBSERVATION WELL CLUSTERS FOR OCEAN WATER DESALINATION

		GEOSCIENCE Support Services, Inc.										
Task	Description	Principal Hydrologist	Senior Engineer	Senior Geohydrologist	Project Geohydrologist	Senior Staff Geohydrologist	Staff Geohydrologist	Technical Illustrator	Clerical	Labor	Reimbursable Expenses ¹	Total Cost
		Hourly Rate	\$291	\$204	\$199	\$169	\$137	\$127	\$118	\$97		
14.0 MINE SAFETY AND HEALTH ADMINISTRATION (MSHA) TRAINING COURSES												
14.1	Mine Safety and Health Administration (MSHA) Training Courses [PARTIALLY COMPLETED]	16	16	12	32		80			\$ 25,956	\$ 1,500	\$ 27,456
14.2	Prepare Preliminary Monitoring Locations and Well Designs (Tables and Figures) for Permit Application - Monitoring Well MW-5 - COMPLETED	5		5		17	5	2		\$ 4,135		\$ 4,135
14.3	Prepare Preliminary Monitoring Locations and Well Designs (Tables and Figures) for Permit Application - Monitoring Well MW-6 - COMPLETED	1		5		12	5	2		\$ 4,135		\$ 4,135
Subtotal - Task 14		22	16	24	32	24	92	4	0	\$ 34,226	\$ 1,500	\$ 35,726
15.0 OBSERVATION WELL CONSTRUCTION - TWO (2) OFF-SITE OBSERVATION WELL CLUSTERS												
15.1	Reconnaissance Evaluation and Inclusion of Off-Site Private Wells in Monitoring Plan and Equipment [Currently assumes 5 wells]			8	28					\$ 5,130	\$ 750	\$ 5,880
15.2	Coordination with Drilling Contractor and Review of Contractor Submittals	2		8	8				2	\$ 3,720		\$ 3,720
15.3	Onsite Inspection during Sonic Drilling, Geophysical Borehole Logging and Construction of Observation Wells (Assumes 15 field days per cluster)	6		12	111		401			\$ 74,349	\$ 12,750	\$ 91,599
15.4	Mechanical Grading Analysis to Verify Pre-Designed Filter Pack Gradation (Assumes 10 samples total)			2			15			\$ 2,318		\$ 2,318
15.5	Field Prepared Well Design for Each Monitoring Well Cluster	2	8	4	4		8			\$ 4,232		\$ 4,232
15.6	Onsite Inspection during Development of Observation Wells and Sampling (lab costs not included) (Assumes 5 field days per cluster) ²	2		8	12		102			\$ 20,638	\$ 7,700	\$ 28,338
15.7	Coordination with Water Quality Laboratory and Sample Delivery			2	5		20			\$ 3,603	\$ 500	\$ 4,303
15.8	Purchase and Install Pressure and Conductivity Transducers in Observation Wells (Assumes 1 field day plus 2 days travel) Purchase Install 11 transducers	4	4	8	15		30			\$ 9,947	\$20,775	\$ 30,722
Subtotal - Task 15		16	8	46	205	0	577	0	2	\$ 124,137	\$ 46,975	\$ 171,112
TOTAL HOURS AND COST - Tasks 14 + 15		38	24	70	237	24	669	4	2	\$ 158,363	\$ 48,475	\$ 206,838

Notes:
¹ Assumes 13 hour days during construction and development work.
² Assumes all well development discharges will be to the ground surface for infiltration.

SUPPLEMENT to SUBCONSULTANT AGREEMENT
AMENDMENT NO. 6
TO
SUBCONSULTANT AGREEMENT
FOR
PROFESSIONAL SERVICES

THIS AGREEMENT, entered into this 1st day of May, 2015, hereinafter referred to as Amendment No. 6, by and between RBF Consulting, located at 9755 Clairemont Mesa Blvd. San Diego, CA, 92124, hereinafter referred to as "RBF", and Geoscience Support Services Inc., located at P.O. Box 220, Claremont, CA, 91711, hereinafter referred to as "SUBCONSULTANT".

WHEREAS, RBF and SUBCONSULTANT have entered into an agreement on November 12, 2012 (hereinafter referred to as Original Agreement) for as-needed geotechnical engineering services, for the Monterey Peninsula Water Supply Project (MPWSP) Test Slant Well.

WHEREAS, RBF desires to amend the Original Agreement to have SUBCONSULTANT perform additional professional and technical services, and SUBCONSULTANT desires to perform such services,

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained, and intending to be legally bound hereby, the parties hereto agree as follows:

I. SCOPE OF SERVICES

In addition to technical services specified in the Original Agreement and Amendments No. 1-5, SUBCONSULTANT shall perform in a proper manner, satisfactory to RBF and in accordance with recognized codes of practice, the design services defined below for the MPWSP Test Slant Well project, between May 1, 2015 and October 31, 2015 (6 months).

Task 8001: Provide construction support services for offsite monitoring well facilities in association with the test slant well facilities at the CEMEX Site, including, but not limited to (refer to attachments):

- MW-7, MW-8, and MW-9 monitoring wells preparation, construction, and testing;
- Purchase and install pressure and conductivity transducers for nine (9) MWs;
- Monitoring well data collection, analysis, and reporting;
- Test Slant Well water quality data collection, analysis, and reporting;
- Long Term Pumping Test and Monitoring – Phase II (6 months);
- Coordination with quality laboratory and sample delivery; and
- Additional Tasks requested by RBF / Cal-Am.

II. COMPENSATION AND PAYMENT

For satisfactory performance of the services in accordance with the recognized Codes of Practice as described above, the total not-to-exceed (NTE) limit for this Amendment (Task 8000) is \$989,991. Payment is based on Paid-When-Paid (PWP). All other terms and conditions for compensation and payment shall be in accordance with the Original Agreement.

III. TERMS AND CONDITIONS

All other terms and conditions of the Original Agreement shall remain in effect, unless otherwise specified herein. This Amendment addresses SUBCONSULTANT costs from May 1, 2015 up to October 31, 2015.

IV. ENTIRE AGREEMENT

Amendment No. 6 and the Original Agreement constitute the whole agreement between the parties with respect to the subject matter contained herein and there are no terms other than those contained therein. No modification or amendment of this Amendment No. 6 shall be valid unless in writing and signed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives have executed this Amendment No. 6 as of the date first written above.

RBF Consulting:

Geoscience Support Services, Inc.:

By:

Date:

Title: SR VICE PRESIDENT

By:

Date:

Title: VICE PRESIDENT